

Amendments to the Claims:

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An isolated nucleic acid sequence comprising at least a DR-4 nuclear receptor binding site, wherein said nucleic acid sequence functions as a transcriptional enhancer of the 5-aminolevulinic acid synthase gene.
2. (Original) The nucleic acid sequence of claim 1 with the proviso that said sequence does not comprise a sequence set forth in Seq. Id. No. 8 to 10.
3. (Previously Presented) The nucleic acid sequence of claim 1, wherein said sequence comprises the sequence set forth in Seq. Id. No. 1.
4. (Previously Presented) The nucleic acid sequence of claim 1, wherein said nucleic acid sequence further comprises a nuclear factor 1 binding site (NF-1) and/or a DR-5 nuclear receptor binding site.
5. (Previously Presented) The nucleic acid sequence of claim 1, wherein said nucleic acid sequence mediates chemical compound induced transcriptional activation.
6. (Previously Presented) The nucleic acid sequence of claim 5, wherein said chemical compound is a candidate compound for therapeutic use or a drug.
7. (Previously Presented) The nucleic acid sequence of claim 1, wherein said sequence comprises a sequence selected from the group consisting of Seq. Id. Nos. 2 to 6 and Seq. Id. No. 7.
8. (Currently Amended) A genetic construct comprising a the nucleic acid sequence of claim 1, wherein said nucleic acid is operably linked to a nucleic acid encoding a reporter molecule.

9. (Original) The genetic construct of claim 8, wherein said reporter molecule has an enzymatic activity.
10. (Original) The genetic construct of claim 9, wherein said reporter molecule activity can be detected by colorimetry, radioactivity, fluorescence or chemiluminescence.
11. (Previously Presented) The genetic construct of claim 8, wherein said reporter molecule is selected from the group consisting of luciferase, beta-galactosidase, chloramphenicol acetyltransferase, alkaline phosphatase and green fluorescent protein.
12. (Previously Presented) A method for testing compounds for modulation of heme and/or P 450 cytochromes synthesis comprising contacting suitable cells comprising a genetic construct according to claim 8 with a test compound and detecting enhanced or repressed expression and/or transcription of the nucleic acid sequence encoding the reporter gene.
13. (Original) The method of claim 12, wherein said compound is a candidate drug for therapeutical use or a drug.
14. (Previously Presented) The method of claim 12, wherein enhanced expression of the nucleic acid sequence encoding the reporter gene is detected by colorimetry, fluorescence, radioactivity or chemiluminescence.
15. (Previously Presented) The method of claim 12, wherein enhanced transcription of the nucleic acid encoding the reporter gene is detected by quantitative PCR.
16. (Previously Presented) The method of claim 12, wherein said cells are Leghorn Male Hepatoma (LMH) cells, other hepatoma cells, monkey kidney cells (CV-1, COS-1) or human kidney cells.
17. (Canceled)
18. (Canceled)

19. (Currently Amended) An isolated nucleic acid sequence comprising at least a DR-4 nuclear receptor binding site, wherein said nucleic acid sequence functions as transcriptional enhancer of the 5-aminolevulinic acid synthase gene upon addition of a compound that induces a 5-aminolevulinic acid synthase gene.

20. (Currently Amended) A method for testing at least one testing compound as a modulator of heme and/or P450 cytochromes synthesis comprising:
 providing an expression system comprising the isolated nucleic acid sequence of claim 19,
 adding said at least one testing compound, and
 ascertaining modulation of expression levels in said expression system, wherein said modulation is mediated by said nucleic acid sequence.

21. (Currently Amended) The method of claim 20, wherein said isolated nucleic acid sequence is Seq. Id. No. 8, Seq. Id. No. 9, Seq. Id. No. 10 or Seq. Id. No. 39.

22. (Currently Amended) The method of claim 20, wherein said isolated nucleic acid is operably linked to a nucleic acid encoding a reporter molecule.

23. (New) The nucleic acid sequence of claim 1, wherein said sequence comprises a sequence set forth in Seq. Id. No. 8 to 10 or SEQ ID No. 39.